FILE COPY
KR4
KR4M

6688

VOLTAGE REGULATED POWER SUPPLY

MODEL KR4, KR4M

SERIAL A-. 5907

KEPCO LABORATORIES
131 - 38 Sanford Avenue
Flushing 55, New York

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MODEL KR4
*MODEL KR4M

SPECIFICATIONS:

DC OUTPUT VOLTAGE

VOLTAGE: 195 - 325 volts continuously variable.

CURRENT: 0-300 milliamperes continuous duty.

REGULATION: In the range 195 - 325 volts, the output voltage variation is less than 0.2 volts for line fluctuation from 105 - 125 volts and less than 0.2 volts for load variations from minimum to maximum current.

RIPPLE VOLTAGE: The ripple voltage is less than 3 millivolts RMS under any condition of loading and line voltage within the limits specified above.

AC OUTPUT VOLTAGES

VOLTAGE: Two 6.3 volts, unregulated, and isolated from chassis and DC output.

CURRENT: 5 amperes maximum each, may be operated in series or parallel. For series operation, 12.6 volts at 5 amperes, join terminals 5 to 6 and connect to 4 and 7. For parallel operation, 6.3 volts at 10 amperes, join terminals 4 to 6 and terminals 5 to 7 and connect to either pair.

FUSE PROTECTION: Input fuse and DC output fuses on front panel.

OUTPUT TERMINATIONS: The DC and AC output terminals are brought out to a barrier strip on the rear of the chassis. Either positive or negative terminal of the DC supply may be grounded. A terminal is provided on the barrier strip for this purpose. Two blank terminals are also provided.

*METERS: Voltmeter: 0 - 500 volts, 3-1/2" rectangular.

Milliameter: 0 - 300 milliamperes, 3-1/2" rectangular.

CONTROLS: Power on-off switch and DC on-off switch on front panel. DC output control - screwdriver locking type mounted at the rear of the chassis.

PHYSICAL SPECIFICATIONS: Rack panel construction. Panel height 7", width 19", depth 11", color gray. This unit is designed for relay rack mounting.

OPERATING INSTRUCTIONS: The Kepco Model KR4, KR4M Regulated Power Supply is shipped with all tubes in place and is ready for operation.

PROCEDURE FOR TURNING ON POWER SUPPLY:

Turn on the AC power switch and allow the power supply 1/2 minute warm up time for the time delay relay to operate. Turn on the DC output switch to apply the regulated voltage to the load.

The time delay relay in this unit is a thermal type. When the thermal time delay relay closes, an auxiliary double pole-double throw relay is activated. One half of this relay removes the heater voltage from the time delay relay. The other half of the relay closes the primary circuit of the high

voltage plate transformer. In the event that the line voltage should fail momentarily, this double pole-double throw relay will be de-energized. When the line voltage is again turned on, the DC voltage will not re-appear for approximately 30 seconds.

To adjust the DC output voltage to any setting within the range of the instrument, loosen the locking nut on voltage control. Set the control to the desired voltage and then tighten the locking nut.

MAINTENANCE: The components of the Model KR4, KR4M Regulated Power Supply have been selected and tested to provide long and trouble-free operating life. The only service necessary should be the replacement of vacuum tubes. The location of the tubes is clearly marked on the chassis.

REPAIRS: Should any trouble develop in the instrument, it may be ser viced with the aid of the schematic diagram. Major repairs, however, are usually handled by the factory.

Under no circumstances should the instrument be returned to the factory without proper authorization and shipping instructions. In any correspondence with the factory concerning repairs, the type and serial number of the instrument must be given together with a description of the trouble encountered.

PARTS LIST - MODEL KR4
MODEL KR4M*

C1 - 4 MFD 1000 WV
C2 - 3 MFD 1000 WV
C3 - 8 MFD 1000 WV
C4 - 8 MFD 1000 WV
C5 - .05 MFD 500 WV
C6 - 0.1 MFD 600 WV
C7 - 0.25 MFD 600 WV
C8 - 0.1 MFD 600 WV

F1 - 6 Amp Fuse
F2 - 1/2 Amp Fuse

*M1 - Milliameter 0 - 300 MA DC
*M2 - Voltmeter 0 - 500 V DC

PL1 - Neon Lamp NE51
PL2 - Neon Lamp NE51

R1 - 250 K 2 watt Pot
R2 - 30 K 10 watt
R3 - 50 K 10 watt
R4 - 100 K 20 watt
R5 - 100 Ohm 1 watt
R6 - 100 Ohm 1 watt
R7 - 100 Ohm 1 watt
R8 - 100 Ohm 1 watt
R9 - 47 Ohm 1 watt
R10 - 47 Ohm 1 watt
R11 - 47 Ohm 1 watt
R12 - 47 Ohm 1 watt
R13 - 100 Ohm 1 watt
R14 - 100 Ohm 1 watt
R15 - 100 Ohm 1 watt
R16 - 100 Ohm 1 watt
R17 - 1.0 Meg 1 watt
R18 - 500 K 1 watt
R19 - 500 K 1 watt
R20 - 100 K 1 watt
R21 - 100 K 1 watt
R22 - 65 K 1 watt
R23 - 170 K 1 watt
R24 - 100 K 1 watt
R25 - 150 K 1 watt
R26 - 92 K 1 watt
R27 - 82 K 1 watt

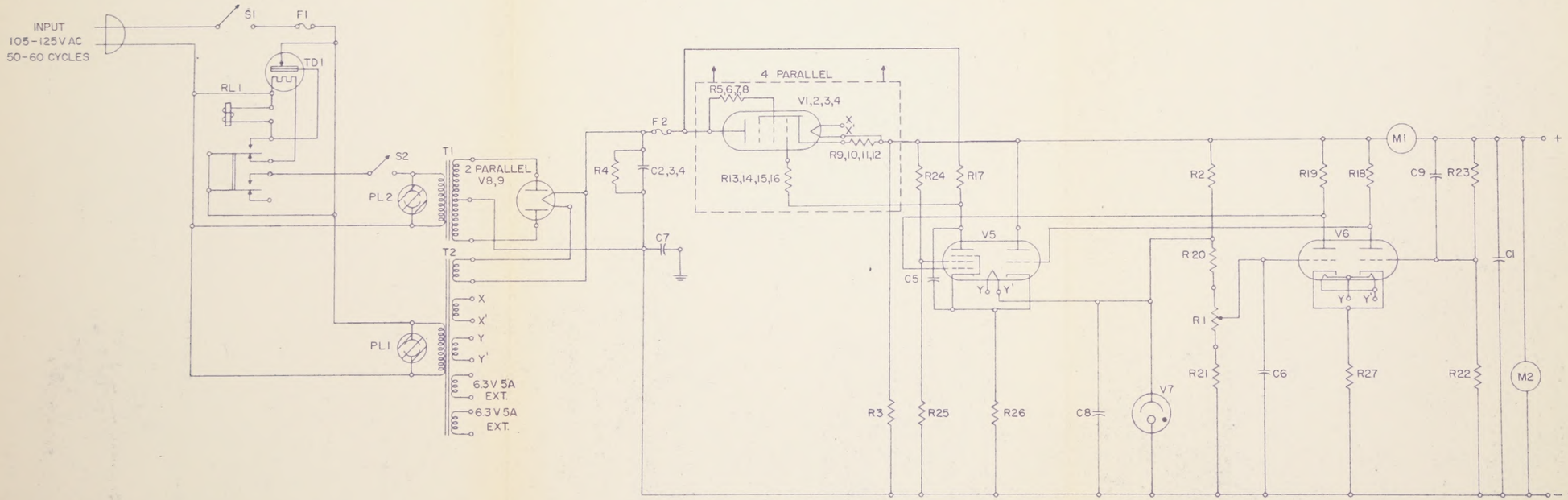
RL1 - DPDT Relay

S1 - SPST Switch
S2 - SPST Switch

T1 - Transformer 100-559
T2 - Transformer 100-564

TD1 - [illegible]

V1 - [illegible]
V2 - [illegible]
V3 - [illegible]
V4 - [illegible]
V5 - [illegible]
V6 - 12AX7
V7 - 85A2/OG3
V8 - 5U4GB
V9 - 5U4GB



TERMINAL STRIP

-	G	+	6.3	6.3				
1	2	3	4	5	6	7	8	9

VOLTAGE RANGE

195-325V DC 300 MA
6.3V AC 5AMPS
6.3V AC 5AMPS

M1, M2 — KR4M ONLY

KEPCO LABORATORIES
FLUSHING NEW YORK

ITEM	MODEL	DATE	DRAWING NO
POWER SUPPLY	KR4 KR4M	6-21-55	S — KR4 KR4M — 01
	DR. BY BB	CK BY Jmk	SHEET 1 OF 1